

CLAIMS

[1] An apparatus which reproduces a moving image file, said apparatus comprising:

a table size obtaining unit operable to obtain, from a recording medium, size information of a table which holds index information for the moving image file;

a memory for storing index information;

a memory size obtaining unit operable to obtain size information of said memory;

a calculating unit operable to calculate a thinning-out ratio of the index information so that the size of the table becomes equal to or smaller than the size of said memory;

a thinning-out unit operable to thin out the index information based on the thinning-out ratio; and

a writing unit operable to write the thinned-out index information into said memory.

[2] The reproducing apparatus according to Claim 1,

wherein said calculating unit is operable to calculate the thinning-out ratio of the index information so that the index information is thinned out at regular intervals with respect to a total reproduction time of the moving image file.

[3] The reproducing apparatus according to Claim 1,

wherein said calculating unit is operable to calculate the thinning-out ratio of the index information so that the index information is thinned out based on a weight assigned to the index information depending on a reproduction time of the moving image file.

[4] The reproducing apparatus according to Claim 3, further comprising

a file characteristic detecting unit operable to detect a characteristic of the moving image file,

wherein in the case where said file characteristic detecting unit detects that the contents of the moving image file is a movie,
5 said calculating unit is operable to calculate the thinning-out ratio of the index information so that a density of the index information becomes lower as the reproduction time of the moving image file passes.

10 [5] The reproducing apparatus according to Claim 3, further comprising

a reproduction start point detecting unit operable to detect a reproduction start point of the moving image file,

wherein said calculating unit is operable to calculate the
15 thinning-out ratio of the index information so that a density of the index information becomes lower before the reproduction start point detected by said reproduction start point detecting unit, and the density of the index information becomes higher after the reproduction start point detected by said reproduction start point
20 detecting unit.

[6] The reproducing apparatus according to Claim 3, further comprising

a reproduction mode detecting unit operable to detect a
25 reproduction mode of the moving image file,

wherein in the case where said reproduction mode detecting unit detects an introduction reproduction mode for searching for the beginning of the moving image file, said calculating unit is operable to calculate the thinning-out ratio of the index information so that a
30 density of the index information becomes higher in an introduction reproduction section, and the density of the index information becomes lower in a section other than the introduction reproduction

section.

[7] The reproducing apparatus according to Claim 3, further comprising

5 an operational preference detecting unit operable to detect an operational preference of a user,

wherein in the case where said operational preference detecting unit detects that the user uses a specific reproduction function with a predetermined frequency or higher, said calculating
10 unit is operable to calculate the thinning-out ratio of the index information so that a density of the index information becomes higher in a reproduction section which is required when the reproduction function is used, and the density of the index information becomes lower in a reproduction section which is not
15 required when the reproduction function is used.

[8] The reproducing apparatus according to Claim 3, further comprising:

20 a file characteristic detecting unit operable to detect a characteristic of the moving image file;

a reproduction start point detecting unit operable to detect a reproduction start point of the moving image file;

a reproduction mode detecting unit operable to detect a reproduction mode of the moving image file;

25 an operational preference detecting unit operable to detect an operational preference of a user; and

a selecting unit operable to selectively cause one of the following units to operate: said file characteristic detecting unit; said reproduction start point detecting unit; said reproduction mode
30 detecting unit; and said operational preference detecting unit.

[9] The reproducing apparatus according to Claim 1, further

comprising

a reproducing unit operable to reproduce the moving image file,

5 wherein said calculating unit is operable to calculate a reproduction start point of the moving image file based on the thinning-out ratio, and

said reproducing unit is operable to reproduce the moving image file from the reproduction start point.

10 [10] A method for reproducing a moving image file, said method comprising:

a table size obtaining step of obtaining, from a recording medium, size information of a table which holds index information for the moving image file;

15 a memory size obtaining step of obtaining size information of a memory for storing index information;

a calculating step of calculating a thinning-out ratio of the index information so that the size of the table becomes equal to or smaller than the size of the memory;

20 a thinning-out step of thinning out the index information based on the thinning-out ratio; and

a writing step of writing the thinned-out index information into the memory.

25 [11] A program for reproducing a moving image file, said program causing a computer to execute:

a table size obtaining step of obtaining, from a recording medium, size information of a table which holds index information for the moving image file;

30 a memory size obtaining step of obtaining size information of a memory for storing index information;

a calculating step of calculating a thinning-out ratio of the

index information so that the size of the table becomes equal to or smaller than the size of the memory;

a thinning-out step of thinning out the index information based on the thinning-out ratio; and

5 a writing step of writing the thinned-out index information into the memory.